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THE CHALLENGE OF THE CEREBRAL PALSIED BLIND CHILD

by ELINOR H. LONG

American Foundation for the Blind
15 West 16th Street, New York 11, N.Y.

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AMERICAN FOUNDATION
FOR THE BLIND INC.

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Preface

In presenting this publication the American Foundation for the Blind expresses its appreciation to the author, Miss Elinor H. Long, and to New York University—Bellevue Medical Center Institute of Physical Medicine and Rehabilitation.

From March 12, 1951, to April 6, 1951, the Institute conducted a specialized training course for counselors and placement workers with cerebral palsied which Miss Long attended by special arrangement between the Foundation and the Institute. With her background, training, and experience in work with children, both blind and sighted, plus this specialized course, Miss Long proceeded to develop this pioneer pamphlet on the cerebral palsied blind child which the American Foundation for the Blind is pleased to publish.

M. Robert Barnett
EXECUTIVE DIRECTOR

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Acknowledgments

I should like to take this opportunity to express my sincere appreciation to those whose interest in the problem of the blind cerebral palsied made possible the compilation of this material. The names of officials participating in the survey of educational facilities are too numerous to list here, but the institutions which they represent will be found at the end of this paper.

Special mention must also be made of the cooperation, guidance, and encouragement I received from those whose names appear below. My deepest thanks for the help they so willingly gave.

Mrs. Esther Kivet, R.N., and the staff at the Bergen County Cerebral Palsy Center, Ridgewood, New Jersey.

The Henry W. Baer's, River Edge, New Jersey.

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Mrs. Eveline E. Jacobs, Social Service Consultant, National Society for Crippled Children and Adults, Inc.

Miss Josephine L. Taylor and Miss Josephine Brown, New Jersey Commission for the Blind.

Miss Kathern F. Gruber, Miss Georgie Lee Abel, Miss Helga Lende, Dr. P. C. Potts, and Dr. Nathaniel J. Raskin of the American Foundation for the Blind.

ELINOR H. LONG

April 30, 1952

The Challenge of the Cerebral Palsied Blind Child

I. Multiple Handicaps in General

A recent visitor to this country from abroad was heard to comment, "You Americans are certainly the most organization-minded people I have ever known. You have founded committees, unions, lodges, clubs, societies, foundations, leagues, associations, fraternities, or councils dedicated to every conceivable purpose—from the preservation of the art of barber shop quartet singing to the advancement of man's knowledge of the universe. Is it possible that there is anyone in your country who does *not* belong to something?"

As well as to probably every other aspect of our American way of life, this observation is surely applicable to the various handicap groups existent within our society—the blind, the deaf, the crippled, the mentally retarded, the cardiac, etc.—and to the many agencies, both public and private, that are devoted to their service. However, what of the multiple-handicapped individual? Is it possible that he may not at present *belong to something?* Is he going unserved because he does not fit into the specialty of any *one* organization? Or are the services being rendered him insufficient at times because of a lack of coordination among the specialty groups concerned with each of his particular handicaps? The answers to both these questions are all too frequently in the affirmative, and in consequence it is the handicapped individual himself who suffers.

The reason for the existence of this difficult situation is

mainly that our agencies, like our society, are overspecialized. Most agency personnel have been trained and have had experience only in the field served by the agency that employs them. As a result their knowldge of other handicaps is usually superficial. Furthermore, most agencies assume responsibility for meeting the various needs of their clients, such as medical treatment, therapy, and special education, by using a "teamwork approach" to each case. They have consequently set up routine programs of referral either entirely within their own organization or in combination with a group of experts on the outside who have had experience with the same handicap specialty represented by the agencies themselves. The client thus embarks upon a routine that was previously established, not just for him individually, but for those generally handicapped as he is. Any variations can usually be handled on an individual basis, so long as they still fall within the machinery of the organization. But the multiple handicap has no respect for the routine of a single agency and boldly demands services from two or more. Thus it interferes with several established routines and affords considerable complication. The multiple-handicapped individual obviously cannot pursue the same patterns as the one with the single handicap.

There are several logical solutions to these problems. First of all, the training of personnel employed by the agencies should certainly include a study of all the "disabilities", rather than of any single handicap alone; for out of knowledge grow a deeper understanding and a more earnest interest. Second, more research should be done on the most prevalent combinations of handicaps and special consultants eventually named to agency staffs to handle multiple cases. Third, machinery should be set up for interagency coordination of services to be rendered to the multiple-handicapped. Finally, much more free interchange of ideas should exist between agencies representing different handicaps, and perhaps even interchange of personnel—especially in the case of those with multiple handicaps. It these remedies were effected within the agencies which have been designed to improve conditions for handicapped people, we might then have reason to expect a better acceptance of the multiple-handicapped by society in general.

II. Questionnaire on the Status of the Blind Cerebral Palsied Child

One of the multiple handicaps now requiring serious attention is the combination of cerebral palsy and blindness. It is difficult to determine the frequency with which this particular combination is now occurring, but state agencies for the blind report that a "startling number" of blind children of preschool age who have the additional handicap of cerebral palsy have lately been referred to them. Isolated cases of this combination have certainly existed in the past, but as the total number was small the problem was approached on an individual basis. However, now that the number is noticeably increasing, and especially on the preschool level, it is necessary to study the situation more carefully and devise plans for more thoroughly and systematically meeting the future needs of these multiple-handicapped children.

Recently the American Foundation for the Blind, in an effort to discover the present status of blind children with cerebral palsy, sent out questionnaires to all residential schools for the blind and public school systems operating braille classes throughout the United States and Canada, and also to institutions offering residential facilities to crippled children including the cerebral palsied. Out of a total of eighty-one institutions for the blind invited to participate in the survey, fifty-nine (or about seventy-three per cent) returned their questionnaires. Sixty-eight institutions for the crippled were also included in the survey; of these, fifty-five (or approximately eighty per cent) responded. These institutions were asked how many applications they had received within the past ten years for blind cerebral palsied children, how many of these had been granted admission, and how many had been denied. Schools for the blind reported the receipt of approximately 125 applications, admission of about 75, and refusal of about 30. Institutions for the cerebral palsied reported approximately 75 applications, 50 admissions, and 25 denials. Officials reporting for the schools for the blind pointed out that their figures should not be interpreted too strictly because of the fact that admissions statistics are generally maintained on the basis of eye conditions rather

than concurrent disabilities. The figures given by schools for the blind therefore are probably underestimated.

Caution must be exerted in using any of these figures to determine the number of blind cerebral palsied children in our society during the years 1942-1952. First of all, from twenty-five to thirty per cent of the existent residential institutions did not participate in the survey. Secondly, many of those participating were not in existence over the entire ten-year period. (This is especially true of the cerebral palsy institutions.) As already noted, no accurate statistics have been kept by the institutions, and it is also possible that some of the applications reported by one official were duplicated in the report of another. Furthermore, of course, fear of stigma and ignorance of the extent to which even the most severe physical handicaps can be overcome have undoubtedly prevented and are still preventing many blind cerebral palsied individuals from making application at any institution whatever. Finally, the survey did not generally include clinics set up to serve out-patients only, since most of these have been but recently established and do not ordinarily admit blind children.

The figures quoted above, however, are important to our study in other ways. They indicate, for example, that a little more than half of those actually applying for admission to institutions for the blind or for the orthopedically disabled have received the benefit of any kind of service. They also indicate that of those who have been granted admission three-fifths have attended schools for the blind and two-fifths institutions for the crippled.

The questionnaires sent out by the American Foundation for the Blind also aimed to discover the main reasons behind the refusal of admission to blind cerebral palsied children by institutions offering educational programs. Three of the reasons most frequently given were common to both types of institutions: lack of trained personnel (including teachers, therapists, and house parents), lack of specialized equipment, and the low mental ability of some applicants. Schools for the blind also refused cerebral palsied children because they were not sufficiently trained in the activities of daily living, because their unsteady balancing might cause danger to themselves and to the other blind children in the

school, and because the arrangement of the buildings would present an insurmountable problem in getting about from one place to another. Additional reasons listed by schools for the cerebral palsied in refusing admission to blind children included: overloading of therapists on the staff, restrictions of certain state laws, and the fact that the additional handicap of blindness would necessitate a longer program of treatment than the institutions could afford to provide.

These reasons upon analysis seem to be legitimate enough bases for the refusal of blind cerebral palsied children. But the tragedy of the situation is that after their refusal too little zeal has been exerted in providing for their training elsewhere. Some of them have finally been placed in state mental hospitals, though they may not be mentally deficient or even retarded. Some have merely remained at home without the benefit of therapy and special education. Some, of course, have at last found refuge in those few institutions in our society which will admit anyone, regardless of how severely handicapped he may be.

Officials at the institutions participating in our survey were asked what recommendations they might suggest regarding the educational placement of blind cerebral palsied children. The general feeling expressed was that fundamental training should be obtained at the cerebral palsy clinic under the supervision of professionally trained physical, occupational, and speech therapists. Some officials recommended that these children later continue in a school for the cerebral palsied but assigned to a teacher who has specialized in the education of the blind. It was suggested that this special teacher be provided by the public school system, or by an agency for the blind, or that she be employed directly by the cerebral palsy school itself. Other officials were of the opinion that the cerebral palsied blind should best be educated in a school for the blind but that provisions must be made by the schools to continue the therapy programs undertaken in the cerebral palsy clinics. Representatives of both groups recognized that while relatively less severe cases can be handled by the schools for the cerebral palsied or by the schools for the blind more difficult cases might require special facilities. Here there was considerable eva-

sion of responsibility. But in general it was felt that the education of these people could best be provided in a school for the blind, if special dormitory and classroom accommodations could be constructed for this purpose and furnished with the necessary equipment, and if special arrangements for therapy programs could be offered by the crippled children's agency. These plans would naturally entail a great amount of cooperation between the school for the blind and the crippled children's agency—not only in the building program and staffing, but also in obtaining the necessary funds for a project that would undoubtedly prove expensive. Because of the expense involved, and also because of the limited number of children who would require so specialized a program of services, it was suggested that regional schools might be the best solution to this problem.

All three of the recommendations on educational placement have their merits, and whether the cerebral palsied blind children are to be educated in a school for the blind with help from the crippled children's agency or in a school for the cerebral palsied with help from an agency for the blind, the fact remains that any educational program for them will require interagency cooperation and planning. The educational result will be the same under either circumstance, and probably the program to be followed by any one child will still be determined through analysis of his individual needs. We must make certain, however, that his needs are met instead of being lost somewhere in the void that separates two different agencies.

Special mention should be made of the reports received from the special education departments of some of our larger cities in relation to blind cerebral palsied children. Of the twenty-six public school systems invited to be represented in the survey, replies were received from eighteen (or about sixty-nine per cent). On the whole the public school officials supported many of the recommendations suggested by their colleagues in the residential schools. Some of them stated, however, that if the condition of cerebral palsy were such that it prevented the child from reading and writing braille he would be considered uneducable in the public school system. Yet it would seem that such a child, if sufficiently intelli-

gent, could still profit from an educational experience by using the talking book and possible an electric typewriter (the operation of which would require a certain amount of manual ability but not the kinesthetic sensitivity necessary for braille reading). In most cases the blind child with cerebral palsy can be served satisfactorily in braille classes, although in a few instances better results have been obtained in the orthopedic classes with special tutoring by a braille teacher.

In another part of the questionnaire the institutions were asked whether they would consider the admission of the blind cerebral palsied if consultant service were provided by the secondary agency. In answer to this question thirty-six of the schools for the blind replied that they would consider admitting the cerebral palsied if assisted by the crippled children's agency, and five refused or were uncertain. Fourteen of the braille classes replied affirmatively, and four were negative or uncertain. Of the institutions for the cerebral palsied thirty-eight gave affirmative answers, twelve were negative, and five were uncertain. The rate of negative answers for the cerebral palsy institutions is more than twice that of the schools and classes for the blind. Probably this divergence is further evidence of the prevailing public attitude that blindness is of itself a highly complex condition requiring a wealth of specialized techniques in medical treatment and education; and when it is complicated further by cerebral palsy, the cases would seem much too difficult to attempt. The attitude of those engaged in work for the blind is more sympathetic toward the cerebral palsied, perhaps because the less severe cases have in scattered instances been enrolled in schools for the blind in the past. But educators of the blind are not entirely above reproach, however, as is evidenced by the nine negative answers received from them. Again we must stress how important it is for all those working with exceptional children to be well acquainted with other types of handicaps so that they can visualize more readily the results that might be attainable for the multiple-handicapped individual.

In replying to the question on consultant service from the secondary agency many officials made comments which are of

value to this report. A large proportion of the institutions for the cerebral palsied are primarily hospitals and offer educational programs only in conjunction with medical treatment. In order for the blind to be admitted here they would have to be in need of medical treatment, bracing, or training in the use of special devices. At most of the institutions the individual's admission would depend upon his general prognosis, to be determined by the medical board. A few officials stated that there would have to be enough applicants to warrant their setting up the specialized services that would be required. One said that his institution might be interested if the consultant service were sufficient "to make us feel we could do the job well." Another declared apparently on the basis of past experience, "Depending upon the amount of parental cooperation."

Comments from officials at the schools for the blind in reference to this same question indicated that they would consider cerebral palsied children if they could feed and dress themselves and were not too seriously handicapped to handle stairs. One reported that the cerebral palsied could participate in the educational program of his school, provided that they lived outside of the school. Several practical superintendents, realizing the extra costs involved, stated that to admit cerebral palsied children they would require financial assistance either from a state appropriation or from funds supplied by the crippled children's agency. Most of the institutions for the blind will consider any applications for children with mild cerebral palsy conditions.

Only a few of the institutions answering negatively on this question gave any special reason for their refusal. One school for the cerebral palsied mentioned a long waiting list of people desiring admission and indicated that because blindness complicates the training program of the individual they would admit those with "just crippling conditions." Another stated bluntly that there were "no facilities available for the blind," and another, "Do not enroll the blind." One school for the blind complained that the state department would not be in favor of their admitting the cerebral palsied.

None of those reporting for the schools made any attempt to

define the term "consultant service." Representing an agency for the crippled, Miss Agnes Reeda, Program Director, Western Section, of the Bay State Society for the Crippled and Handicapped, stated that her particular agency had not yet been called upon specifically for help with blind children. However, should the occasion arise, her agency would do all in its power to stimulate "community recognition of the need for additional service" and would assist the family in finding and using whatever suitable resources might be available. She said, "We have done some tentative exploring with the school for the deaf, which has admitted a child with cerebral palsy. I think this is the way in which we can see a service such as ours being of assistance to a school for the blind. We have offered to evaluate this deaf child with cerebral palsy, and to suggest ways in which she could be helped at the school for the deaf. This would include help from the occupational therapist in such things as writing, activities of daily living; special help from the speech therapist . . . and help from the physical therapist if this were indicated. The school teacher who's had experience with a child with cerebral palsy might also have ways of doing things that would be helpful to the teacher in the school. As I see it, consultant service is hard to define or describe because of the specific help that an organization for the crippled and handicapped might be able to give, and the specific needs that a school might see. It's the kind of thing in which exploratory work would have to be done in order to arrive at the kind of service one organization could be to the other."

Speaking on behalf of a state agency for the blind, Miss Josephine L. Taylor. Director of Education for the New Jersey Commission for the Blind, has explained the term as follows: "Our 'Consultant Service' is merely having the Educational Counselors from our agency advise the persons in the Cerebral Palsy clinics or the workers from the Crippled Children Commission regarding what adaptations for techniques might seem advisable due to the visual handicap. We also attempt to plan with them regarding educational possibilities for the children in whom we are mutually interested." This is the type of interagency cooperation which should be more widely promoted.

III. Agencies and the Blind Cerebral Palsied

The cerebral palsied are served primarily by state agencies for crippled children as well as by private organizations such as state chapters of the National Society for Crippled Children and Adults, Inc., United Cerebral Palsy, and by several parent groups and service clubs like Rotary and Kiwanis. The outstanding groups serving the blind are the state agencies for the blind, the American Foundation for the Blind, the Lighthouse societies of several large cities, a few religious organizations, and the Lions clubs. In order to improve the services now being rendered to individuals with the multiple handicap of cerebral palsy and blindness, these organizations as well as the medical and therapy groups and the educators in both fields must become increasingly aware of the need for combined efforts in all aspects of the work. As Dr. R. E. Bruner, Medical Director of the Cerebral Palsy Center in Kansas City, Missouri, said in his reply to the questionnaire, "Our experiences have impressed on me and on my staff, the need for research in the field of multiple handicaps (since many of our cerebral palsied children have such), the need of programs to work with such children so that standards of diagnosis, training and treatment, as well as prognosis can be developed, and the need for combined efforts on the part of various groups working in their specialties to be coordinated." There is much yet to be done certainly in the research program on the medical aspects of cerebral palsy, and there is a great need also for more doctors who are specialized in this field and who are capable of correct diagnosis. In the questionnaire several officials quoted cases of mistaken diagnosis of blindness, which, when discovered to be conditions of poor muscular coordination, disqualified the individuals from admission to schools for the blind.

This multiple handicap will also require the services of more therapists and teachers of special education, more preschool clinics, and more complete programs of education in both day and residential schools. Finally, more literature must be prepared for distribution to parents of the multiple-handicapped children and accompanied by a rigorous campaign to improve the understand-

ing and acceptance of these children by the society in which they live. All of the groups and agencies concerned must work together to develop these ideals into actuality. But the initiative in the development of these various projects must be asserted primarily, it would seem, by the agencies themselves.

Perhaps a brief summary of the general aspects of blindness and cerebral palsy—their incidence and causes, their classifications, and the types of educational facilities available—would be helpful to parents, agency personnel, and others working in the interest of these handicapped children.

IV. General Aspects

Blindness is one of the oldest handicaps known to mankind. It is mentioned in the Bible and in the literature and historical annals of ancient Greece and India and China. Many of its most prevalent causes, such as small-pox, have been almost completely eliminated through continual progress in the field of medicine, and yet ironically enough through this same medical advancement new causes, such as retrolental fibroplasia, have appeared. One of the youngest handicaps of our society is cerebral palsy, which was described by a physician for the first time in 1862,[1] but because of its severe nature the individuals affected were kept "in the farthest corner" until as recently as fifteen or twenty years ago. Medical science knows no remedy for cerebral palsy, since it results from damage to the tissues of the brain, the most intricate and delicate structure of the human body. Blindness usually involves merely the loss of the ability to see; otherwise the blind do not necessarily differ from so-called normal or nonhandicapped individuals. In the case of the cerebral palsied, however, the individual is nearly always multiple-handicapped. How he will be affected will depend upon the location of the brain-damaged areas. For example, neuro-muscular disturbances are always present in cerebal palsy, but in addition it is estimated that seventy-five per cent of the cases have a speech involvement, thirty-three to fifty per cent of the cases are mentally retarded, fifty per cent have visual

[1] Taylor, Eugene J., *Help at Last for Cerebral Palsy,* p. 3.

defects, and many others suffer hearing and sensory losses.[2] It is undoubtedly due to the severity of these combined handicaps that society has been so long reluctant to investigate the very nature of cerebral palsy, let alone undertake a program of habilitation and education for them. The public is not yet entirely receptive to the blind, who have been in their midst for centuries, but at least they have recognized them to the extent of providing them with abundant opportunities for training and frequently for employment.

V. Causes and Incidence

The problem of blindness today is not so much the control of infectious diseases, the improvement of prenatal care, or of accident prevention, as it is of old age. Out of the 260,000 estimated blind persons in the United States, approximately fifty per cent are over the age of sixty-five, while only ten per cent are under the age of twenty.[3] Among the younger group the condition known as retrolental fibroplasia, occurring most frequently in infants born prematurely, is now perhaps the most outstanding cause of blindness. It is these retrolental fibroplasia cases which seem to be often affected with cerebral palsy also.

According to a formula devised by Dr. Winthrop M. Phelps and his associates the number of cerebral palsied individuals above the age of six should now exceed a half million Americans.[4] While blindness is largely a condition accompanying old age, cerebral palsy is primarily a condition which manifests itself in infancy. Damage to the brain tissues can occur before, during, or directly after birth through a prolonged lack of oxygen or by direct injury to the brain. Malformation of the brain cells can also cause cerebral palsy, as can hemorrhages, infections, malnutrition, metabolic disturbances, and the incompatibility of the Rh factor of the blood. Cerebral palsy can be acquired later in life through trauma, brain infections such as meningitis and sleeping sickness, brain

[2] Miller, Melba, *Special Education for the Cerebral Palsied,* pp. 1-2.
[3] American Foundation for the Blind, *Blindness in America,* pp. 5-6.
[4] Taylor, *loc. cit.*

tumors, toxic poisoning, anoxia (lack of oxygen as, for example, in asphyxiation), and as a result of various vascular conditions.[5] The term "cerebral palsy", however, is restricted to the condition arising in childhood.

VI. Classifications

The blind are classified generally according to the amount and type of vision which they retain. The terms most frequently used are: total blindness, light perception, color perception, object perception, and partially seeing or borderline vision.

The cerebral palsied are classified according to clinical types, depending upon the location of the brain damage and the resultant behavior abnormalities. The *spastic* suffers damage in the premotor area of the cortex and is characterized by hyperirritability in the muscular response to stimuli. Speech, chewing, and swallowing are usually affected. The *ataxic* type, whose damage area is the cerebellum, has difficulty in walking and standing because of his loss of equilibrium. The *athetoid* type probably results from damage to the basal ganglia of the mid-brain. There are many variations of athetosis, but the chief characteristic of the type is in the words of Dr. Phelps "involuntary motion of an unpatterned character." The *tremor* type results from brain lesions in the basal ganglia and is most prevalent in cases of acquired cerebral palsy. The involuntary contractions of the tremor type are rhythmically regular and are reciprocal. The *rigid* type, believed to be caused by anoxia and often appearing after sleeping sickness, is characterized by the iron-pipe rigidity of the muscles. Many of these cases are mentally retarded because, it is thought, the brain lesions are not localized but extend over a larger area of the brain. Dr. George G. Deaver estimates that from thirty-five to forty per cent of the cerebral palsied are spastics, thirty to thirty-five per cent are athetoid, and ten to fifteen per cent are ataxic. The tremor and rigidity types, therefore, comprise only a very small proportion of the entire cerebral palsy population.[6]

[5] Pearlstein, Meyer A., *Medical Aspects of Cerebral Palsy.*
[6] Deaver, George G., *Clinical Aspects of Cerebral Palsy.*

VII. Preschool Training

The preschool training of blind children is accomplished in several different ways. Some state agencies employ special personnel to visit the home and assist the parents in their psychological reaction to their child's blindness as well as to offer suggestions for medical treatment or for teaching the child the activities of daily living. In larger cities there are clinics for blind infants and their mothers which offer a similar program. Sometimes these clinics are directed by the state agency, or they may be operated by a local private agency. Some residential schools for the blind conduct short summer institutes for the same purpose. In addition a few institutions supply residential facilities for a nursery program; unfortunately home conditions are occasionally such that this type of program must exist.

The young cerebral palsied child must be taken to a clinic usually held in connection with a hospital, although some clinics are also set up in small, residential schools directed by an orthopedic specialist. The child's training begins as early as possible. Some of the clients are less than six months of age. The clinics divide their services into four categories: medical (including dental), physical therapy, occupaional therapy, and speech therapy. The physicians determine the type of therapy best suited for the child and are responsible for prescribing the proper braces, wheel chairs, and other devices. The physical therapy program aims to develop each child's maximum ability in the various motor skills, i.e., rolling, crawling, sitting, reciprocating, kneeling, standing, walking, and climbing. The occupational therapy program, utilizing many of the skills in the process of development in the physical therapy program and coordinating them with the speech therapy activities as well, trains each child in the processes of grasping and relaxation (using either hand or both hands), and in the daily activities such as attending to physical needs, self-feeding, dressing, and writing and communication. The speech therapy program emphasizes the proper use of all parts of the speech mechanism and trains the child in speech comprehension and speech production. The clinics also serve the parents of cerebral

palsied children through direct or group counseling, and in many clinics mothers are called upon to assist the therapists in their work with the children. The philosophy behind this arrangement is that while thus engaged the parents can gain a better insight into the purposes of the therapy programs and how they can be accomplished and will use this understanding to better advantage in their own home situations.

VIII. Formal Education

The formal education of blind children has been carried on mainly in residential schools, some of which are more than a hundred years old. These schools are mostly state institutions, a few are private, and some are privately operated but receive state support. More recently the public school systems of large cities have developed educational programs for blind children within their own school facilities. Classes have been set up under the direction of a teacher who has had training in the specialized techniques of teaching the blind, and the children receive their braille instruction in these small braille classes but participate in most of the programs offered to the seeing children attending the same school. In some states, providing the child is educable, he is automatically sent to the state residential school. If he happens to live in a community where there are special classes for the blind in the public schools, he is sent there. Then there are schools which have set up residential facilities for the deaf-blind, the emotionally disturbed or mentally retarded blind, and children thus handicapped are sent to these centers from all over the country. In states which do not support their own residential school many factors are taken into consideration when assigning a child to the place where he will pursue his education—his home background, his maturity level, his general health, the distance from his home to the nearest source of special education, his concurrent disabilities, and so on.

The cerebral palsied child often attends the preschool clinic before entering upon his formal education in order to attain his maximum level in the use of hands, arms, legs, and speech. Some-

times even after he starts school he continues therapy at the clinics, especially if the school itself provides none. Like the blind child, the child with cerebral palsy is afforded several possibilities for furthering his education, providing that he is educable. However, the facilities available to him are not so numerous, the standards vary greatly from one institution to another, and there is also wide divergence in the cost of tuition. Only a few of the states currently maintain special residential schools for crippled children, and there are only a few private schools receiving state support. Only four or five of these residential schools serve the cerebral palsied alone. There are quite a number of small private institutions throughout the country; some of these are operated as part of a hospital, some are connected with religious organizations or with a university, and some are sponsored by social agencies or special foundations. The public schools in the larger cities have attempted to develop orthopedic classes as part of their special education programs, and classes for the cerebral palsied alone are beginning to appear in some sections. However, this movement is comparatively new and, in fact, is still largely in the experimental stage. The children are provided with transportation to and from school, and therapy programs are also generally included with the academic offerings. For those who are severely crippled homebound instruction is also provided in most of the cities.

IX. Present Plans and Outlook for the Future

The questionnaire distributed by the American Foundation for the Blind brought to our attention the encouraging news that the majority of workers for the blind and for the cerebral palsied are definitely aware that more must be done in the interest of the multiple handicap. Many of the officials who reported their present inability to be of service to this handicap group stated that they recognized this as a problem which must soon be met. Many also admitted the need but were uncertain as to how it could be solved. Most of those reporting had given serious thought to the situation and were thus able to offer the constructive suggestions discussed earlier in this paper. An appreciatively large number of these

asked to be kept informed of any research which was being planned in this area or was currently in progress.

Reports of definite activities in some sections of the country were included in the replies to the questionnaire. For example, from the cerebral palsy specialists came statements of cooperative programs with agencies for the blind in Missouri, Kansas, Florida, and New Jersey. Schools for the blind reported cooperative programs with crippled children's agencies in Massachusetts, Alabama, and South Carolina. In Missouri the Cerebral Palsy Center in Kansas City is experimenting in the field of multiple handicaps, including that of cerebral palsy and blindness, and plans are under way at the present time to obtain grants for extending this research. In California the school for the blind and the school for the deaf are now availed of the services of therapists from the state for work with the mild cases of cerebral palsy already enrolled in these schools. In Canada a school for the blind stated that if sufficient demand should arise they would be willing to supply a teacher of the blind for tutoring blind cerebral palsied children at the cerebral palsy clinic. The school for the blind in Maryland expressed a willingness to set up a regional school for the blind cerebral palsied, if there should be sufficient need for this type of service, and if the necessary funds could be raised for the project. In New Jersey a school for the cerebral palsied reported the present enrollment of several blind children and plans in progress for a more extensive program coordinating the services of the school itself, the New Jersey Commission for the Blind, the State Department of Health, and the Crippled Children Commission, with the possible participation of the National Society for Crippled Children and Adults and the American Foundation for the Blind.

This response indicates clearly that many of our professional workers have been dissatisfied with the lack of properly coordinated services for the multiple-handicapped in the past and are alert to the demand for improved programs of service in the future. Their general interest in the problem of the cerebral palsied blind child is not only sincere, but actively constructive, as is evidenced by the new plans being prepared in several sections of the country. Complete interagency cooperation on a nation-wide scale is still

far in the future, but attention to the multiple-handicapped and their problems will certainly bring that goal nearer to realization. Then at last the multiple-handicapped will really belong to something—not just to one agency, or even two or more, but to society in general.

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General

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Medical and Psychological

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Social Service

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Recommended Readings on the Blind

General

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Medical and Psychological

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Parents

American Foundation for the Blind. Is Your Child Blind? New York, 1951.
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Social Service

Hill, Beth Eaton. Social Treatment of the Young Blind Child. *Social Casework,* November 1951.

Periodicals

Cerebral Palsy

Cerebral Palsy Review (formerly *Spastic Review*)
Publisher: Institute of Logopedics, Inc.
2400 Jardine Drive
Wichita, Kansas

The Crippled Child
Publisher: National Society for Crippled Children and Adults
11 South LaSalle Street
Chicago 3, Illinois

Blindness

AFB Publications
Publisher: American Foundation for the Blind
15 West 16th Street
New York 11, New York

American Association of Instructors of the Blind and American Association of Workers for the Blind: *Proceedings*
Available on loan from: American Foundation for the Blind

International Journal for the Education of the Blind
Publisher: New York Institute for the Education of the Blind
999 Pelham Parkway
New York, New York
The New Outlook for the Blind
Publisher: American Foundation for the Blind

Institutions for the Cerebral Palsied

Because of rapid growth in the cerebral palsy movement and the resultant increase in the number of institutions serving cerebral palsied and other types of crippled children, this publication makes no attempt to include a complete list of residential schools or special public school classes for these children. Such a list would be outdated between the date of preparation and that of publication. For the most recent information concerning clinics, homes, or schools for the cerebral palsied, consult the U. S. Office of Education or the National Society for Crippled Children and Adults.

The following institutions for crippled children participated in the survey conducted by the American Foundation for the Blind:

Charlanne School
1019 Oxmoor Road
Birmingham 9, Ala.

Pineview Manor
Cook Road
Montgomery, Ala.

Children's Convalescent Center
Jacksonville, Arkansas

School for Cerebral Palsied Children
Box #2610, Edgewood Road
Redwood City, Calif.*

Hillside House
501 Ontare Road
Santa Barbara, Calif.

Kabat-Kaiser Institute
1815 Ocean Front
Santa Monica, Calif.

Kabat-Kaiser Institute
2600 Alameda Street
Vallejo, Calif.

The Children's Hospital
19th Avenue at Downing
Denver, Col.

Newington Home and Hospital for Crippled Children
Newington, Conn.

Salisbury Central School
P. O. Box #471
Lakeville, Conn.

Kabat-Kaiser Institute
2633 16th Street N.W.
Washington 9, D. C.

Villa Rose Hospital School
Box #1387
DeSoto City, Fla.

* A special reply to the questionnaire was also received from F. W. Doyle, Chief, Bureau of Special Education, California Department of Education.

School of Corrective Motor Education
Lago Del Mare
Pompano Beach, Fla.

Davison School of Speech Correction
1780 N. Decatur Road, N. E.
Atlanta, Ga.

Idaho State Elks' Convalescent Home for Children
Route #9
Boise, Idaho

Chicago Clinic of Physical Medicine
6970 N. Clark Street
Chicago 26, Ill.

Illinois Children's Hospital-School
2551 N. Clark Street
Chicago 14, Ill.

Martha Washington Home for Dependent and Crippled Children
4515 Drexel Blvd.
Chicago 15, Ill.

St. John's Crippled Children's School and Hospital
Springfield, Ill.

Hospital School
University of Iowa
Iowa City, Iowa

Capper Foundation Center
234 Fillmore Street
Topeka, Kansas

Louisiana State School for Spastic Children
R. F. D. #1
Alexandria, La.

Hyde Memorial Home
616 High Street
Bath, Maine

Kerman Hospital
Windsor Mill Road
Baltimore 7, Md.

Children's Rehabilitation Institute
Cockeysville, Md.

Detroit Orthopaedic Clinic
5447 Woodward Avenue
Detroit 2, Mich.

Gillette State Hospital for Crippled Children
1003 Ivy Avenue East
St. Paul 6, Minn.

Cerebral Palsy Hospital School
2548 N. State Street
Jackson, Miss.

Cerebral Palsy Center
3811 Broadway
Kansas City, Mo.

Shodair Crippled Children's Hospital
Helena, Mont.

Hattie B. Munroe Home for Convalescing Crippled Children
2824 N. 66th Avenue
Omaha, Neb.

Crippled Children's School
Jamestown, N. D.

The Walter D. Matheny School
Far Hills, N. J.

Carrie Tingley Hospital School
Hot Springs, N. M.

Crotched Mountain Rehabilitation Center
Greenfield, N. H.

Jewish Sanitarium and Hospital for Chronic Diseases
86 E. 49th Street
Brooklyn 3, New York

Buffalo Children's Hospital
Cerebral Palsy Department
309 W. North Street
Buffalo 1, New York

The House of St. Giles the Cripple
Garden City, New York

Reconstruction Home, Inc.
Ithaca, New York

Edith Hartwell Clinic
LeRoy, New York

New York University
Institute of Physical Medicine and Rehabilitation
400 E. 34th Street
New York, New York

Blythedale
Valhalla, New York

New York State Rehabilitation Hospital
West Haverstraw, New York

North Carolina Hospital for Children with Cerebral Palsy
Durham, N. C.

Rainbow Hospital
Green Road
Cleveland 21, Ohio

Rose-Mary Home
19350 Euclid Avenue
Cleveland, Ohio

Toledo Society for Crippled Children
2740 W. Central Avenue
Toledo 6, Ohio

Youngstown Rotary Society Home for Crippled Children
420 Werner Street
Youngstown, Ohio

St. Christopher's Children's Hospital
2600 N. Lawrence Street
Philadelphia, Pa.

Industrial Home for Crippled Children
1426 Denniston Avenue
Pittsburgh 17, Pa.

Crippled Children's Hospital and School
2500 W. 26th Street
Sioux Falls, S. D.

Crippled Children's Hospital School
2009 Lamar Avenue
Memphis, Tenn.

Moody State School
Box #420
Galveston, Tex.

Washington State Cerebral Palsy Center
530 Olympic Place
Seattle, Washington

The Cove Schools
600 21st Street
Racine, Wis.

Residential Schools for the Blind

*Alabama Institute for the Deaf and Blind
South Street
Talladega, Alabama

*Arizona School for Deaf and Blind
Speedway and Grande Avenue
Tuscon, Arizona

*Arkansas School for the Blind
2600 W. Markham Street
Little Rock, Arkansas

School for Colored Blind and Deaf
21st and Madison Streets
Little Rock, Arkansas

*California School for the Blind
3001 Derby Street
Berkeley, California

*School for Deaf and Blind
Colorado Springs, Colorado

Connecticut Institute for the Blind
10 Holcomb Street
Hartford, Connecticut

School for the Colored Deaf and Blind
St. Augustine, Florida

Florida School for the Blind
St. Augustine, Florida

*Georgia Academy for the Blind
Macon, Georgia

*Diamond Head School for the Deaf and Blind
3440 Leahi Avenue
Honolulu 56, Hawaii

State School for the Deaf and Blind
Gooding, Idaho

Illinois School for the Blind
658 E. State Street
Jacksonville, Illinois

*Indiana School for the Blind
7725 College Avenue
Indianapolis, Indiana

*Iowa Braille and Sight Saving School
1002 G Avenue
Vinton, Iowa

*State School for the Blind and Sight Saving Classes
1100 State Avenue
Kansas City, Kansas

Kentucky School for the Blind
1867 Frankfort Avenue
Louisville, Kentucky

*Louisiana State School for the Blind
1120 Government Street
Baton Rouge, Louisiana

* Indicates school participating in the survey of the American Foundation for the Blind.

*Louisiana State School for the Negro Blind
Southern Branch P. O.
Baton Rouge, Louisiana

*Maryland School for the Blind
Taylor Avenue
Overlea 6, Maryland

*Perkins Institution and Massachusetts School for the Blind
Watertown 72, Massachusetts

*Michigan School for the Blind
1141 N. Pine Street
Lansing 6, Michigan

*Minnesota Braille and Sight Saving School
Faribault, Minnesota

*Mississippi School for the Blind
Old Canton Road
Jackson, Mississippi

*Mississippi School for the Blind
Colored Department
Capers Avenue
Jackson, Mississippi

Missouri School for the Blind
3815 Magnolia Avenue
St. Louis, Missouri

*Montana School for the Blind
3800 2nd Avenue
Great Falls, Montana

*Nebraska School for the Blind
10th Street and 10th Avenue
Nebraska City, Nebraska

St. Joseph's Home and School for the Blind
249-253 Baldwin Avenue
Jersey City, New Jersey

*New Mexico School for the Blind
Alamogordo, New Mexico

*Lavelle School for the Blind
E. 221st Street and Paulding Ave.
New York, New York

*New York Institute for the Education of the Blind
999 Pelham Parkway
New York 67, New York

*New York State School for the Blind
Batavia, New York

*North Carolina State School for the Blind and Deaf
Avent Ferry Road
Raleigh, North Carolina

*North Dakota State School for the Blind
Bathgate, North Dakota

*Ohio State School for the Blind
660 East Main Street
Columbus 15, Ohio

Consolidated Negro Institute
Taft, Oklahoma

Oklahoma School for the Blind
Muskogee, Oklahoma

*Oregon State School for the Blind
Church and Mission Streets
Salem, Oregon

Overbrook School for the Blind
64th Street and Malvern Avenue
Philadelphia 31, Pennsylvania

*Royer-Greaves School for the Blind
Paoli, Pennsylvania

*Western Pennsylvania School for the Blind
201 Bellefield Avenue
Pittsburgh, Pennsylvania

Institute for Blind Children
Santurce, Puerto Rico

*School for the Deaf and the Blind
Spartanburg, South Carolina

South Dakota School for the Blind
Gary, South Dakota

*Tennessee School for the Blind
86 Hermitage Avenue
Nashville, Tennessee

Blind, Deaf, and Orphan School
Austin, Texas

Texas School for the Blind
W. 45th Street
Austin, Texas

*Utah School for the Blind
20th Street and Monroe Avenue
Ogden, Utah

*Virginia School for the Deaf and the Blind
Staunton, Virginia

*Virginia State School
Pear Avenue
Newport News (P. O. Hampton), Va.

*Washington State School for the Blind
2214 E. 13th Street
Vancouver, Washington

*West Virginia Schools for the Colored Deaf and Blind
Institute, West Virginia

West Virginia Schools for the Deaf and Blind
Romney, West Virginia

*Wisconsin School for the Visually Handicapped
1900 W. State Street
Janesville, Wisconsin

CANADA

*Halifax School for the Blind
Halifax, Nova Scotia

Nazareth Institute for the Blind
Montreal, Quebec

*Ontario School for the Blind
Brantford, Ontario

School for the Deaf and the Blind
4100 W. 4th Avenue
Vancouver, British Columbia

Braille Classes in Public School Systems

California
- Long Beach
- **Los Angeles
- San Francisco
- San Mateo
- Campbell

District of Columbia
- **Washington

Georgia
- Atlanta

Illinois
- **Chicago

Louisiana
- **New Orleans

Michigan
- **Battle Creek
- **Dearborn
- **Detroit
- Grand Rapids
- **Jackson

Minnesota
- **Minneapolis
- St. Cloud

New Jersey
- **Elizabeth
- Hackensack
- Jersey City
- **Montclair
- **Newark
- **Paterson

New York
- **Buffalo
- **New York City

Ohio
- **Cincinnati
- Cleveland
- **Youngstown

Oregon
- Portland

Texas
- Fort Worth

Washington
- Seattle

Wisconsin
- Milwaukee

Canada
- **Winnipeg, Man.

** Indicates schools participating in American Foundation for the Blind survey.

General Sources of Information

Federal Agencies

Board of Public Welfare
Child Welfare Division
462 Indiana Avenue N. W.
Washington 1, D. C.

U. S. Office of Education
Federal Security Agency
Washington 1, D. C.

State Agencies

State departments for service to the blind
State departments for service to crippled children
State departments of education

Private Agencies

American Foundation for the Blind
15 West 16th Street
New York 11, New York

Cerebral Palsy Review
2400 Jardine Drive
Wichita, Kansas

National Society for Crippled Children and Adults, Inc.
11 South LaSalle Street
Chicago 3, Illinois

United Cerebral Palsy
50 West 57th Street
New York, New York

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Long, Elinor H.
The challenge of the cerebral palsied blind child.

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